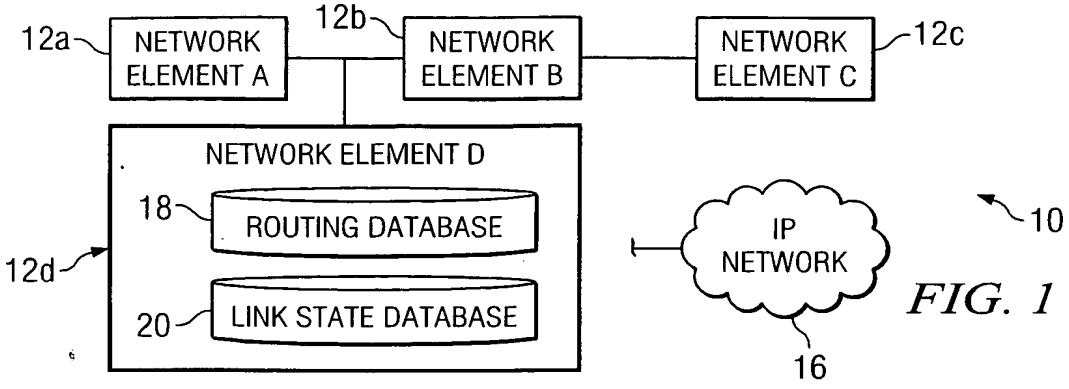
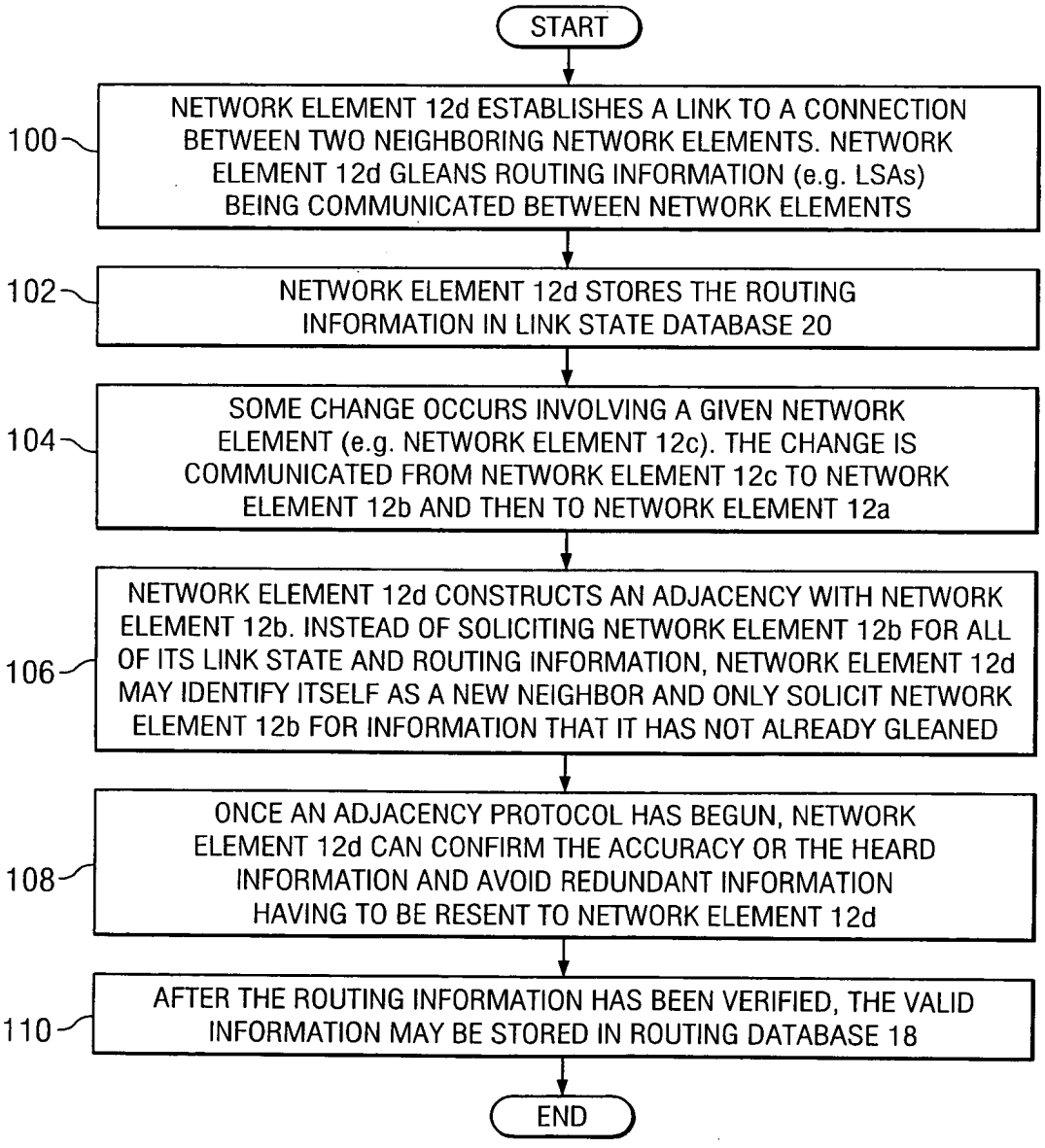

12a
NETWORK ELEMENT A
12b
NETWORK ELEMENT B
NETWORK ELEMENT C
12c
NETWORK ELEMENT D
18
ROUTING DATABASE
12d
20
LINK STATE DATABASE
IP NETWORK
10
16

FIG. 1

FIG. 2


START
100
NETWORK ELEMENT 12d ESTABLISHES A LINK TO A CONNECTION BETWEEN TWO NEIGHBORING NETWORK ELEMENTS. NETWORK ELEMENT 12d GLEANS ROUTING INFORMATION (e.g. LSAs) BEING COMMUNICATED BETWEEN NETWORK ELEMENTS
102
NETWORK ELEMENT 12d STORES THE ROUTING INFORMATION IN LINK STATE DATABASE 20
104
SOME CHANGE OCCURS INVOLVING A GIVEN NETWORK ELEMENT (e.g. NETWORK ELEMENT 12c). THE CHANGE IS COMMUNICATED FROM NETWORK ELEMENT 12c TO NETWORK ELEMENT 12b AND THEN TO NETWORK ELEMENT 12a
106
NETWORK ELEMENT 12d CONSTRUCTS AN ADJACENCY WITH NETWORK ELEMENT 12b. INSTEAD OF SOLICITING NETWORK ELEMENT 12b FOR ALL OF ITS LINK STATE AND ROUTING INFORMATION, NETWORK ELEMENT 12d MAY IDENTIFY ITSELF AS A NEW NEIGHBOR AND ONLY SOLICIT NETWORK ELEMENT 12b FOR INFORMATION THAT IT HAS NOT ALREADY GLEANED
108
ONCE AN ADJACENCY PROTOCOL HAS BEGUN, NETWORK ELEMENT 12d CAN CONFIRM THE ACCURACY OR THE HEARD INFORMATION AND AVOID REDUNDANT INFORMATION HAVING TO BE RESENT TO NETWORK ELEMENT 12d
110
AFTER THE ROUTING INFORMATION HAS BEEN VERIFIED, THE VALID INFORMATION MAY BE STORED IN ROUTING DATABASE 18
END